Process for Pre-Design Work on a Project

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Direction

For projects requiring pre-design work that is not covered by the regional scoping funds, create a new WIN and delivery schedule for the pre-design work for the project. Include "Pre-Design" in the WIN title. This WIN is referred to as a Minor WIN. This is alternative #3 of the alternatives analyzed (alternatives analyzed in no particular order).

For projects that have already had WOA that could potentially be retroactively updated to this new tracking structure, please coordinate with CPDM on an individual basis. Preference is to update the project to use the new methodology.

CPDM may direct region program management to deviate from this standard and use a separate strategy in specific situations.

Background and Alternatives Analyzed

Some projects require substantial analysis work done prior to the establishment of the final scope. This includes hydraulic design work for fish barrier (referred to as Preliminary Basis of Design, or PBOD), conceptual design work for unstable slopes, early community engagement, and the development of alternatives for programmed safety and mobility projects. To fund and perform this work, several strategies have been proposed:

1) Open a portion of the PE Work Order for pre-design, both with a "pre-design" project summary for mobility and safety jobs, or no project summary at all
2) Use funds from an appropriate bucket established for this type of work
3) **Minor WIN and Work Order for pre-design (i.e. similar to fish barrier PBOD)**
    a. **This is the Option directed by CPDM.**
    b. **Reminder – Please use an MS work order unless instructed otherwise by CPDM.**
4) Create a separate PIN for the pre-design work

Having a singular process to plan and manage pre-design work will be beneficial to optimize funds planning, approval processes, and funds tracking. This document describes various options for the process and discusses identifies pros and cons of each. This information was used by CPDM and Region personnel to discuss and select the preferred alternative of *Adding a minor WIN for pre-design* (current preferred option based on PBOD discussion).

Options

Option 1 – Open portion of the PE Work Order for pre-design

Open PE Phase WIN for both the pre-design and design work.

Pro's:

- Keeps expenditures associated with the PIN - good for federal funding

- No system changes needed, this option is available now

Con's:

- One work order for both pre-design and design teams
- WOA stays open until PE phase end (could be 1-3 years). WOA Groups need to be closed at the end of pre-design so that redistributed and unintended charges are not charged
- PE start milestone is associated with pre-design effort, not main design effort
- No Project Summary approval verification on the work order authorization when the main design effort begins. WOA process must track which PINs with a PE Approval Code of "S" are just for pre-design and still require a Project Summary

Option 1A – Same as Option 1, except use "A" approval code for PE Phase

This option is the same as Option 1, except to use the 'A' approval code to signify approval of the pre-design effort only. A Project Summary needs to be submitted to HQ to switch the approval code from 'A' to 'S' for the transition from pre-design to main design effort.

Pro's:

- PFS group can use approval code to verify Project Summary for these projects
- No system changes needed, this option is available now
- Keeps expenditures associated with the PIN - good for federal funding

Con's:

- Doesn't follow current approval code definition
- WOA would stay open until PE phase end (could be 1-3 years). WOA Groups would need to be closed at the end of pre-design so that redistributed and unintended charges would not be charged
- PE start milestone is associated with the pre-design, not main design effort

Option 2 – Managing Buckets

Using buckets to manage pre-design can be implemented in either of two work processes. The first process is establishing an amount for an upcoming biennium, or upcoming biennia, to charging the pre-design work to that bucket. For example, buckets have been set up for fish barrier work and geotechnical survey work. The second process is to transfer funds from a project to the bucket when pre-design work is ready to happen (*note – I am not sure this strategy has ever been done before, but seems like a necessity for buckets and mobility/safety jobs)*. HQ will establish the WOA and identify a new group for each PIN. The group title will indicate the PIN and funding amount for the pre-design.

Pro's:

- Two WOAs will be established; one for pre-design (bucket-wide) and one for Design
- PE start milestone reporting accuracy. Project Delivery can monitor the actual PE start and by using the EC screen WIN selection in CPMS
- No system changes needed, this option is available now

Con's:

- Will be difficult to control costs at the group level

- Removes the association with the original PIN - bad for federal funding
- Predetermining the right amount for a bucket can be problematic
- May violate protocol for line-item PINs established by the legislature

Option 3 – Adding a minor WIN for pre-design

Regions will create a new WIN and delivery schedule for the pre-design on the project

Pro's:

- Two WOAs will be established; one for pre-design, and one for Design. The default is to use an "MS" work order for the pre-design work order on the minor WIN.
- PE start milestone reporting accuracy. Project Delivery can monitor the actual PE start and by using the EC screen WIN selection in CPMS
- Keeps expenditures associated with the PIN – good for federal funding
- Allows for delay between pre-design and design – good for planning
- No system changes needed, this option is available now

Con's:

- No Project Summary approval verification on the work order authorization when the main design effort begins
    - This will be mitigated because the Priority Group will maintain a list of PINs approved to move forward to start the pre-design in advance of the full design phase.
    - Standard Project Summary processes will be followed based on the Major WIN.
- Project must purchase RW or go to AD within 10-years of obligation of the Federal Funds or federal funds will need to be reimburse
    - This will be mitigated by having the pre-design WOA use the federal project improvement type "OTHER (44)", which is normally used for Studies or other types of analysis work that cannot be classified as PE, CN, or RW. Additionally, the same Fed Aid Number will be used for both the pre-design and the PE Design phase if Federal funding is being used.

Option 4 – New PIN for pre-design work for each Project

A new PIN is created for the pre-design work. If the PIN already exists, it is expected that the main PIN will reduce the total cost in CPMS for each PIN by the funding level needed to complete the pre-design. These project funds will be transferred to a new PIN for the pre-design work – one for each project.

Pro's:

- Two WOAs will be established; one for Predesign and one for Design
- PE start milestone reporting accuracy. Project Delivery can monitor the actual PE start and by using the EC screen WIN selection in CPMS
- CPDM PFS group can use approval code to verify Project Summary for these projects.
- No system changes needed, this option is available now

Con's:

- Removes the association with the original PIN - bad for federal funding

Option 5 – CPMS System Change to add a Pre-Design Phase

Update CPMS, TRAINS, WOAS, FATS, PMRS to have an additional pre-design phase. The pre-design phase would be used for the pre-design work order and the design phase would be used for the main design effort.

Pro's:

- Two WOAs will be established; one for pre-design and one for Design
- Main design WOA can be managed by Region PEO
- CPDM PFS group can use approval code to verify Project Summary for these projects
- Keeps expenditures associated with the PIN - good for federal funding
- PE start milestone reporting accuracy. Project Delivery can monitor the actual PE start and by using the EC screen WIN selection in CPMS

Con's:

- Large IT effort to make the change, long time to wait for change to be made